

arrangement of the teeth, in the deep transverse sulci, and in its length compared with its height and width. It is scarce.

BULLA OCCULTA.

Pl. IV. Fig. 11.

B. testâ parvâ, ovato-cylindricâ: spirâ occultâ: labro suprâ elevato, medio recto; aperturâ sub-angustâ, infrâ latâ, rotundatâ.

Shell small, of a dingy white color, ovate-cylindrical, covered with very minute transverse striæ, and with indistinct longitudinal striæ of growth; spire concealed; labrum extends a little below the spire, nearly *straight* above the *centre*, regularly rounded below and at the base; aperture narrow at the upper part, rather broad at the base.

Length $\frac{1}{5}$ inch; breadth $\frac{3}{20}$ inch.

Cabinets of Bost. Soc. Nat. Hist., Amherst and Middlebury Colleges, J. W. Mighels, and C. B. Adams.

REMARKS. If not identical with, this shell is the analogue of, *B. triticea*, Couth. It however differs from that species in being proportionably wider. It is very scarce.

ART. VI.—DESCRIPTIONS AND FIGURES OF THE ARANEIDES OF THE UNITED STATES. BY NICHOLAS MARCELLUS HENTZ. (Communicated July, 1841.)

The Publishing Committee think it proper to inform the readers of this Journal, that the following article is the first of a series on the Araneides of the United States, which has been offered for publication, by the author, to the Boston Society of Natural History. These descriptions and figures will be followed hereafter by others, and the whole will form an illustrated monograph of all the Spiders observed by Professor Hentz in various parts of this country, and will supply a want

which has been long felt in this department of our Natural History.

Class. ARACHNIDES.

Order. PULMONARIA.

Family. ARANEIDES.

Section. *Tetrapneumones*.


Genus. MYGALE. Walckenaer.

Characters. *Eyes eight, placed near together, on the anterior edge of the cephalothorax, in two rows, variously curved; fang of the cheliceres articulated downward; palpi inserted on the extremity of the maxillæ; feet 4. 1. 2. 3. or 4. 1. 3. 2.*

Observation. The distinction between MYGALE and OLETERA is artificial, as a slight elongation of the maxillæ of Mygale would place the palpi at the side; witness MYGALE ? *unicolor*.

1. MYGALE TRUNCATA.

Description. Piceous; cephalothorax with a curved impression behind the middle, *cheliceres* (mandibulæ) terminated by several points above the fang, hairy; abdomen cylindrical, suddenly truncated at the end, and callous at that place, with concentric grooves and six circular impressions; thighs more or less rufous at base; a white membrane between the joints.

Feet 4. 1.  3. 2.

Observations. This spider dwells like other species of this subgenus in cylindrical cavities in the earth. Though many specimens were found, I never saw the lid described by authors as closing the aperture of its dwelling. The very singular formation of its abdomen, which is as hard as leather behind, and which forms a perfect circle, induces me to believe that it closes, with that part, its dwelling, instead of with a lid, when in danger.

Habitat. Alabama.

Fig. 1. *Mygale truncata*. a. Arrangement of the eyes. b. Trophi. c. Side view of the spider. d. Hole in which it resides. e. Respective length of the legs.

2. MYGALE SOLSTITIALIS.


Description. Deep black; cephalothorax with two indentations, cheliceres moderately large; abdomen with several impressions above, and four yellow spots underneath; membrane between the joints white; third pair of legs with the third joint short and crooked; feet hairy, 4. 1. 2. 3. A large species.

Observations. One specimen only (a male,) was found in July, wandering on the ground. The character, derived from the third pair of legs, does not seem to be a mere sexual distinction, as MYGALE *Carolinensis*, the next species, has the same peculiarity, and the description was taken from a female.

Habitat. Alabama.

Fig. 2. Mygale solstitialis. a. The eyes. b. The Trophi. c. The abdomen viewed underneath.

3. MYGALE CAROLINENSIS.

Description. Brownish, very glossy; cephalothorax with two slight impressions near the base; abdomen blackish, not glossy; third joint of the third pair of legs very short and crooked; feet 4.  1. 3. 2.

Observations. This species was communicated to the author by the late Mr. Levi Andrews, of Chapel Hill, North Carolina, a promising young naturalist, snatched by consumption from his numerous friends, and to the memory of whom this tribute is due. The character derived from the third pair of legs is not a sexual one, as this was a female, and the description of MYGALE *solstitialis* was taken from a male, which has the same character.

Habitat. North Carolina.

Fig. 3. Mygale Carolinensis. a. The Eyes.

4. MYGALE GRACILIS.

Description. Rufous; cephalothorax somewhat six-sided, long and narrow; abdomen plumbeous, two nipples very long; feet long, hairy, penultimate joint of the anterior pair with a notch; feet 4. 1. 2. 3.

Observations. This spider, hitherto always found in mid-winter, under stones or on the ground, is probably not the male of *MYGALE Carolinensis*; but the peculiarity of its *first* pair of legs, is, no doubt, a sexual character. The same joint of the feet of the male of my *DYSDERA bicolor*, is not only bent, but has powerful prongs and bristles, which nature has given him as a defence, or as the means of grasping the female.

Habitat. Alabama.

Fig. 4. *Mygale gracilis*. *a.* The eyes. *b.* The right palpus, with the maxilla.

5. MYGALE? UNICOLOR.

Description. Deep rufous; cephalothorax depressed in the middle, with two impressions, cheliceres very large; abdomen smooth; third pair of legs with short, very thick joints; feet 4. 1. 2. 3.

Observations. This species is very distinct from any other, particularly by the manner in which its palpi are inserted. Were the maxillæ extended a little more at their extremity, this spider should be placed in the sub-genus *OLETERA*, which follows. The specimen, from which this description was taken, (a female,) was turned up by the plough, in a field, in the month of May. The manner in which the spiders belonging to *MYGALE* and *OLETERA* live, hidden underground, and probably issuing out only at night, prevents our becoming acquainted with their habits. I doubt whether the males ever dwell in tubular habitations. Much remains yet to be done to complete the history of this genus and that of the next.

Habitat. Alabama.

Fig. 5. *Mygale? unicolor*. *a.* The eyes. *b.* The trophi.